US ERA ARCHIVE DOCUMENT



### U.S. ENVIRONMENTAL PROTECTION AGENCY

# **Air Sampling Report**

Location Name/ID	GI09
City, State	Golden Meadow, Louisiana
Latitude	29.11376
Longitude	-90.1844

Volatile Organic Compounds Chemical Results in µg/m3

DATE RANGE	BENZENE	ETHYLBENZENE	O-XYLENE	TOLUENE
08/21/2010	.61	.83	.83	.72
08/20/2010	.715	.95	.95	1.1
08/19/2010	.54	.73	.73	.63
08/18/2010	.6	.81	.81	.7
08/17/2010	3.5	1.2	1.2	4.2
08/16/2010	.51	.7	.7	.61
08/15/2010	.57	.78	.78	.67
08/14/2010	.44	.6	.6	13

SCREENING LEVELS FOR ONE YEAR AVERAGE EXPOSURE TO VOLATILE ORGANIC COMPOUNDS (VOCs) COMMONLY FOUND IN CRUDE OIL						
Contaminant concentration, 1-year average. Measured in micrograms/cubic meter (µg/m3)	Health Concern?	Action				
Benzene: 20 µg/m3 and below Toluene: 5000 µg/m3 and below Ethylbenzene: 3000 µg/m3 and below Xylene: 3000 µg/m3 and below	Low concern for increased risk of health problems for measurements in this range.	Public: No action suggested. EPA will continue to evaluate sample results.				
Benzene: Above 20 μg/m3 Toluene: Above 5000 μg/m3 Ethylbenzene: Above 3000 μg/m3 Xylene: Above 3000 μg/m3	Level of health concern depends on how much above these levels the measurement is and for how long. Concentrations slightly above these levels for short durations do not generally pose health concerns. There may be some health concern if people are exposed to these levels continuously for a year or more.	Public: No immediate action suggested. EPA will continue to monitor the levels closely. Additional investigation may be needed, e.g., reviewing information about the detected chemical, and where the higher concentrations may be coming from. Additional monitoring may be needed.				
If air pollution reaches levels requiring immed	diate action, you will be notified via local news media.					

DATE RANGE	BENZENE	ETHYLBENZENE	O-XYLENE	TOLUENE
08/13/2010	.52	.68	.68	.79
08/12/2010	.54	.73	.73	.63
08/11/2010	.51	.7	.7	.61
08/10/2010	.62	.85	.85	.74
08/09/2010	.57	.78	.78	.67
08/08/2010	1.6	2.2	2.2	1.9
08/07/2010	2.3	3.2	3.2	2.8
08/06/2010	.63	.85	.85	.74
08/05/2010	.46	.62	.62	.54
08/04/2010	.54	.73	.73	.63
08/03/2010	.58	.79	.79	.69
08/02/2010	.64	.86	.86	.75
08/01/2010	.51	.7	.7	.62
07/31/2010	.55	.75	.75	.675
07/30/2010	.75	1	1	.89
07/29/2010	.54	.73	.73	.63
07/28/2010	.5	.67	.67	.58
07/27/2010	.56	.76	.76	.66
07/24/2010	.6	.81	.81	.7

DATE RANGE	BENZENE	ETHYLBENZENE	O-XYLENE	TOLUENE
07/23/2010	.56	.76	.76	.66
07/22/2010	.55	.74	.74	.64
07/21/2010	.57	.78	.78	.67
07/20/2010	.73	.78	.78	5.1
07/19/2010	.56	.76	.76	.66
07/18/2010	.51	.695	.695	.835
07/17/2010	.56	.76	.76	.66
07/16/2010	.54	.74	.74	.64
07/15/2010	.49	.66	.66	.58
07/14/2010	.56	.76	.76	.66
07/13/2010	.52	.71	.71	.62
07/12/2010	1.7	2.3	2.3	2
07/11/2010	.57	.78	1.1	.67
07/10/2010	.58	.79	.79	.69
07/09/2010	.57	.78	.78	.67
07/08/2010	.54	.73	.73	.63
07/07/2010	.54	.74	.74	.64
07/06/2010	.71	.97	.97	.84
07/05/2010	.97	1.3	1.3	1.1

DATE RANGE	BENZENE	ETHYLBENZENE	O-XYLENE	TOLUENE
07/04/2010	.565	.765	.765	.665
07/03/2010	.54	.73	.73	.97
07/02/2010	.56	.76	.76	.66



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Semi Volatile Organic Compounds Chemical Results in µg/m3

DATE RANGE	BENZO(B)FLUOR ANTHENE	BENZO[A]PYREN E	BENZO[K]FLUORA NTHENE	BENZ[A]ANTHRAC ENE	CHRYSENE	DIBENZ[A,H]ANTH RACENE	INDENO[1,2,3- CDJPYRENE	NAPHTHALENE
07/11/2010	.033	.033	.033	.033	.033	.033	.033	.013
07/10/2010	.034	.034	.034	.034	.034	.034	.034	.025
07/09/2010	.033	.033	.033	.033	.033	.033	.033	.085
07/08/2010	.035	.035	.035	.035	.035	.035	.035	.037
07/07/2010	.033	.033	.033	.033	.033	.033	.033	.023
07/06/2010	.032	.032	.032	.032	.032	.032	.032	.022
07/05/2010	.033	.033	.033	.033	.033	.033	.033	.019
07/04/2010	.034	.034	.034	.034	.034	.034	.034	.047

DATE RANGE	BENZO(B)FLUOR ANTHENE	BENZO[A]PYREN E	BENZO[K]FLUORA NTHENE	BENZ[A]ANTHRAC ENE	CHRYSENE	DIBENZ[A,H]ANTH RACENE	INDENO[1,2,3- CDJPYRENE	NAPHTHALENE
07/03/2010	.032	.032	.032	.032	.032	.032	.032	.063
07/02/2010	.032	.032	.032	.032	.032	.032	.032	.038



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# **Air Sampling Report**

Location Name/ID	GI09
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SCREENING LEVELS FOR ONE-YEAR AVERAGE EXPOSUR	E TO POLYCYCLIC AROMATIC COMPOUNDS (PAHS) COM	IMONLY FOUND IN CRUDE OIL
Contaminant concentration, 1-year average. Measured in		
micrograms /cubic meter (µg/m3)	Health Concern?	Action
Benzene: 20 μg/m3 and below		
Benzo(a)pyrene: .64 μg/m3 and below **		
Benzo(a)anthracene: 6.4 µg/m3 and below		
Benzo(b) fluoranthene: 6.4 µg/m3 and below	Law concern for increased rick of health problems for	Public: No action suggested. EPA
Benzo(k) fluoranthene: 6.4 µg/m3 and below	Low concern for increased risk of health problems for measurements in this range.	will continue to evaluate sample
Chrysene: 64 µg/m3 and below	measurements in this range.	results.
Dibenz(a,h) anthracene: .58 μg/m3 and below		
Indeno(1,2,3-c,d) pyrene: 6.4 µg/m3 and below		
Naphthalene: 30 μg/m3 and below		
Benzene: Above 20 µg/m3		Public: No immediate action
Benzo(a)pyrene: Above .64 µg/m3 **	Level of health concern depends on how much above	suggested. EPA will continue to
Benzo(a)anthracene: Above 6.4 µg/m3	these levels the measurement is and for how long.	monitor the levels closely. Additional
Benzo(b) fluoranthene: Above 6.4 µg/m3	Concentrations slightly above these levels for short	investigation may be needed, e.g.,
Benzo(k) fluoranthene: Above 6.4 µg/m3	durations do not generally pose health concerns. There	reviewing information about the
Chrysene: Above 64 µg/m3	may be some health concern if people are exposed to	detected chemical, and where the
Dibenz(a,h) anthracene: Above .58 μg/m3	these levels continuously for a year or more.	higher concentrations may be
Indeno(1,2,3-c,d) pyrene: Above 6.4 µg/m3	these levels continuously for a year of more.	coming from. Additional monitoring
Naphthalene: Above 30 μg/m3		may be needed.

Polycyclic Aromatic Hydrocarbons Chemical Results in µg/m3

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DATE RANGE	BENZO(B)FLUOR ANTHENE	BENZO[A]PYREN E	BENZO[K]FLUORA NTHENE	BENZ[A]ANTHRAC ENE	CHRYSENE	DIBENZ[A,H]ANTH RACENE	INDENO[1,2,3- CDJPYRENE	NAPHTHALENE
07/11/2010	.033	.033	.033	.033	.033	.033	.033	.013
07/10/2010	.034	.034	.034	.034	.034	.034	.034	.025
07/09/2010	.033	.033	.033	.033	.033	.033	.033	.085
07/08/2010	.035	.035	.035	.035	.035	.035	.035	.037
07/07/2010	.033	.033	.033	.033	.033	.033	.033	.023
07/06/2010	.032	.032	.032	.032	.032	.032	.032	.022

DATE RANGE	BENZO(B)FLUOR ANTHENE	BENZO[A]PYREN E	BENZO[K]FLUORA NTHENE	BENZ[A]ANTHRAC ENE	CHRYSENE	DIBENZ[A,H]ANTH RACENE	INDENO[1,2,3- CDJPYRENE	NAPHTHALENE
07/05/2010	.033	.033	.033	.033	.033	.033	.033	.019
07/04/2010	.034	.034	.034	.034	.034	.034	.034	.047
07/03/2010	.032	.032	.032	.032	.032	.032	.032	.063
07/02/2010	.032	.032	.032	.032	.032	.032	.032	.038



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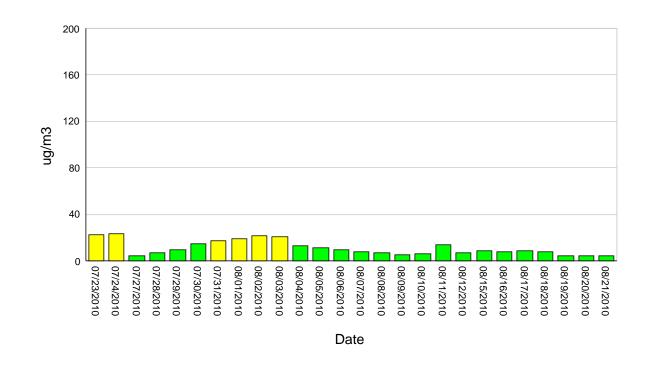
Location Name/ID	GI09
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Localized Monitoring PM2.5 Daily Averages	Index Value	Air Quality Index Levels of Health Concern	Cautionary Statements
0-15.4	0 to 50	Good	None
15.5-35.4	51 to 100	Moderate	Unusually sensitive people should consider reducing prolonged or heavy exertion.
35.5-65.4	101 to 150	Unhealthy for Sensitive Groups	People with heart or lung disease, older adults, and children should reduce prolonged or heavy exertion.
65.5-150.4	151 to 200	Unhealthy	People with heart or lung disease, older adults, and children should avoid prolonged or heavy exertion. Everyone else should reduce prolonged or heavy exertion.
150.5-250.4	201 to 300	Very Unhealthy	People with heart or lung disease, older adults, and children should avoid all physical activity outdoors. Everyone else should avoid prolonged or heavy exertion.
250.5-500.4	301 to 500	Hazardous	People with heart or lung disease, older adults, and children should remain indoors and keep activity levels low. Everyone else should avoid all physical activity outdoors.

#### **Particulates**

Chemical Results in ug/m3

Chemical Results in µg/ms		
DATE RANGE	Particulate Matter 2.5 microns	
08/21/2010	4.53411	
08/20/2010	4.01003	
08/19/2010	4.59	
08/18/2010	7.39	
08/17/2010	8.90553	
08/16/2010	8.11404	



DATE RANGE	Particulate Matter 2.5 microns
08/15/2010	8.94415
08/12/2010	6.53732602
08/11/2010	13.7189
08/10/2010	6.32543
08/09/2010	5.2791
08/08/2010	7.24095
08/07/2010	8.02048
08/06/2010	9.73378
08/05/2010	11.00296234
08/04/2010	12.9741
08/03/2010	20.516
08/02/2010	21.3385
08/01/2010	18.6356
07/31/2010	17.1125
07/30/2010	14.4885
07/29/2010	9.67331353
07/28/2010	6.69996
07/27/2010	4.54739
07/24/2010	23.0553

DATE RANGE	Particulate Matter 2.5 microns
07/23/2010	22.695
07/22/2010	16.11394558
07/21/2010	14.7732
07/20/2010	12.3328
07/19/2010	13.47
07/18/2010	9.45
07/17/2010	9.32
07/16/2010	14.65
07/15/2010	13.8
07/14/2010	20.9362
07/13/2010	13.9721
07/12/2010	16.9
07/11/2010	6.16
07/10/2010	5.6
07/09/2010	11.49
07/08/2010	16.9
07/07/2010	15.77
07/06/2010	11.4775
07/05/2010	6.88034

DATE RANGE	Particulate Matter 2.5 microns
07/04/2010	7.3274
07/03/2010	11.7769
07/02/2010	13.3036